

We claim:

1. A module for an elongated lighting system, said module being of discrete length and having a plurality of electronic devices on an elongated support, said module having electronic devices connected to a pair of electrical conductors, said electrical conductors having a length not exceeding the discrete length of the module, said module being moulded with the electronic devices, elongated support and electrical conductors embedded in at least one of transparent, opaque, and semi-transparent plastic material.

2. The module of Claim 1 in which the electronic devices are LEDs.

3. The module of Claim 1 in which the electronic devices are selected from LEDs, light-emitting plastic compositions, polymers or organic substances, sensors, lighting systems, piezoelectric devices, incandescent bulbs, laser diodes and electroluminescent devices.

4. The module of Claim 2 in which the electrical conductors have a length less than the discrete length of the module.

5. The module of Claim 2 in which said electrical conductors are adapted to be connected to a source of electricity external to said plastic material of the module.

6. The module of Claim 2 in which said electrical conductors are adapted to be connected to a source of electricity internal to said plastic material located beneath the module.

7. The module of Claim 5 in which said electrical conductors are adapted to be connected to a source of electricity external to said plastic material located beneath the module.

8. The module of Claim 2 in which the elongated support has a non-planar shape such that at least one LED is oriented longitudinally from the longitudinal plane of the moulded plastic material.

9. The module of Claim 2 in which the elongated support has a non-planar shape such that at least one LED is oriented laterally from the longitudinal plane of the moulded plastic material.

5 10. The module of Claim 2 in which the elongated support has at least one LED whose light output is at least partially oriented by a lensing device.

11. The module of Claim 2 in which the elongated support is a metallic support.

10 12. The module of Claim 2 in which the elongated support is a heat sink.

13. The module of Claim 2 in which there is a continuous electrical circuit through the LEDs for the discrete length of the module.

15 14. A module for an elongated lighting system, said module being of discrete length and having at least one of a light emitting material, a light emitting device, a detection device, a power generating device and a storage device on an elongated support, said module having at least one of said devices connected to a pair of electrical conductors, said electrical conductors having a length not exceeding the discrete length of the module, said module being moulded with the devices, elongated support and electrical conductors
20 being embedded in at least one of transparent, opaque, and semi-transparent plastic material.

15. The module of Claim 14 including a plurality of light emitting devices.

25 16. The module of Claim 15 wherein the light emitting devices are selected from incandescent bulbs, laser diodes and electroluminescent emitters.

17. The module of Claim 14 having a plurality of at least one of light detection devices, signal analog devices and digital devices.

18. An elongated lighting system comprising a plurality of modules of discrete length arranged end-to-end, said modules being connected to a source of electricity provided by electrical cables disposed beneath said modules, each of said modules having a plurality of LEDs on an elongated support, said LEDs being connected to a pair of electrical conductors having a length not exceeding the discrete length of the module, said modules being moulded with the LEDs, elongated support and electrical conductors being embedded in at least one of transparent, opaque and semi-transparent plastic material.

19. The elongated lighting system of Claim 18 in which the modules are located in an elongated channel, with the electrical cable being beneath the modules and within the channel.

20. The elongated lighting system of Claim 19 in which the electrical cables extend for the length of the channel.

21. The elongated lighting system of Claim 19 in which the elongated lighting system also includes modules having at least one light emitting device or light detecting device.

22. The elongated lighting system of Claim 18 in which the elongated support has a non-planar shape such that at least one LED is oriented longitudinally from the longitudinal plane of the moulded plastic material.

23. The elongated lighting system of Claim 18 in which the elongated support has a non-planar shape such that at least one LED is oriented laterally from the longitudinal plane of the moulded plastic material.

24. The elongated lighting system of Claim 18 in which the elongated support is a metallic support.

25. The elongated lighting system of Claim 18 in which the elongated support is a heat sink.

26. The elongated lighting system of Claim 18 in which there is a continuous electrical circuit through the LEDs for the discrete length of the module.

5 27. A module for an elongated lighting system, said module being electrically inactive and of discrete length which is adapted to act as a passive filler between electrically active sections.

28. A module for an elongated lighting system, said module being electrically inactive and of discrete length which is adapted to act as a passive reflector and U-channel filler between electrically active sections.

10 29. An elongated lighting system comprising a plurality of modules of discrete length arranged end-to-end, said modules being able to generate electricity and light using at least one of embedded piezoelectric devices and solar panels and having one of an embedded and external electrical storage capacity using at least one of batteries and capacitors, said modules having a
15 plurality of LEDs on an elongated support, said LEDs being connected to a pair of electrical conductors having a length not exceeding the discrete length of the module, said modules being moulded with the LEDs, elongated support and electrical conductors being embedded in at least one of transparent, opaque and semi-transparent plastic material.

20 30. An elongated lighting system which comprises a plurality of modules of discrete length arranged end-to-end, said modules being energised by an induced voltage using an embedded magnetic core and coiled wire, said modules having a plurality of LEDs on an elongated support, said LEDs being connected to a pair of electrical conductors having a length
25 not exceeding the discrete length of the module, said modules being moulded with the LEDs, elongated support and electrical conductors being embedded in at least one of transparent, opaque and semi-transparent plastic material.

31. An elongated lighting system of Claim 18 further comprising at least one smart module.

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